

ABSTRACT OF SANITARY REPORTS.

VOL. VI.

WASHINGTON, D. C., FEBRUARY 13, 1891.

No. 7.

[Published at the Marine-Hospital Bureau in accordance with act of Congress of April 29, 1878.]

UNITED STATES.

Report of official experiments with the Koch lymph in progress.

FEBRUARY 11, 1891.

SIR: I have the honor to report that since my last communication the experiments with the Koch lymph have been steadily pursued on the lines indicated by your orders of January 19, 1891.

Eleven patients have been subjected to the treatment up to date, ten males and one female. It has been deemed advisable to suspend treatment in one case, leaving ten now actually under treatment. This suspension was rendered necessary by reason of repeated and violent hæmoptysis in the patient designated as No. 2 in the appended tabular statement, but it must be here stated that the hemorrhages began prior to the treatment, though they have undoubtedly acquired frequency and severity since its inception. It yet remains to be proved whether his present condition is simply incidental or consequent upon the treatment.

The use of the Koch syringe has been abandoned since the second series of injections, it having proved difficult of manipulation and uncertain in delivery. An ordinary hypodermic syringe is now used, and no difficulty is experienced in keeping it perfectly sterilized by the use of absolute alcohol, and by using one-half per cent. carbolic solution for the dilution of the original lymph.

Commencing with an initial dose of .001 gram, the injections have been steadily increased by that amount up to .006 gram, which amount was administered in the treatment of February 10. In two instances only was it deemed inadvisable to administer an increased dose, consequently two patients received two doses, respectively, each of .002 and .003 gram.

It is now noticeable that even with the increased dosage, the pyrexia ("reaction") is longer in making its appearance, does not reach as high a point, and subsides more promptly than it did after the first and second injections. There is also a notable diminution of the critical sweats which formerly marked its defervescence. During the continuance of the fever the severity of the cough and the quantity of the expectoration are markedly increased, and equally well marked is the diminution of both cough and expectoration in the intervals of treatment, which is given every fourth day.

Physical examination shows no change as regards the areas of dullness first mapped out, and very slight and unimportant changes as to respiratory sounds.

Examination of the sputa, twice repeated, shows practically no change in the number or morphology of the tubercle bacilli.

The patients, with the exception of case No. 3, all report themselves as feeling better, with improved appetites, better rest at night, and diminished night sweats.

I append herewith a tabulated statement, showing the weight of the patient at the beginning of treatment, his or her present weight, the number of injections received, and the maximum dose given up to this date:

Patient.	Weight at beginning of treatment.	Present weight.	No. of injections.	Maximum dose.	Difference in weight.		Remarks.
					Gain.	Loss.	
	Kilos.	Kilos.		Grms.	Kilos.	Kilos.	
1.....	73.8	72.45	6	.006	1.35	Treatment suspended.
2.....	63	60.075	4	.003	.....	2.925
3.....	67.5	67.95	6	.006	.45	.....
4.....	53.55	52.2	6	.005	.....	1.35
5.....	51.637	51.975	4	.004	.338	.....
6.....	54.9	55.575	6	.006	.675	.....
7.....	71.1	69.75	6	.005	.....	1.35
8.....	42.75	42.3	6	.006	.....	.45
9.....	44.327	45	4	.003	.673	First treatment.
10.....	55.575	54	5	.005	.....	1.575
11.....	54.9	54.9	1	.001	.....	.....

Very respectfully, your obedient servant,

H. D. GEDDINGS,
Assistant Surgeon, M.-H. S.

Smallpox in Mexico and Texas.

The sanitary inspector of the Marine-Hospital Service at El Paso, Tex., reports as follows, under date of January 31, 1891:

From private information and local Texas newspapers I learn that smallpox is prevailing still at different points in this State.

Smallpox is within 20 miles or less of the city of El Paso, in New Mexico. City Health Officer Yardell, who is also State health inspector, requested me to make an inspection of the different little villages and ranches in southern New Mexico with the view of ascertaining to what degree smallpox prevails and assisting those requiring it. In compliance with this request, I visited several small villages and ranches (having no local physicians) within a radius of about 25 to 40 miles from El Paso, and found several families with children suffering from confluent smallpox.

In the village of Chamberino, about 27 miles from El Paso, 11 children died within the last thirty days, of smallpox; others were convalescing. I vaccinated at this point 23 children. There were some more unprotected children and grown persons, but the mothers objected to have them vaccinated, saying that everybody one day or other would have smallpox, and that it was less dangerous for children to get the disease in childhood, and there being no isolation whatever thought of or enforced of such as have the disease, the mothers' wishes will be very likely gratified. Others would not allow me to vaccinate their children, they having an ill-defined fear that some malign influence

or disease may, through vaccination, be introduced into the bodies. Others refused to be vaccinated on the plea that they had smallpox in their childhood, and that there was no necessity of being vaccinated.

At La Union, another village, I vaccinated 17 children, and at different isolated ranches, 15; total, 55.

There are several other little villages and ranches within 50 miles from here, in New Mexico, and I am informed that smallpox is prevailing there, with many children not vaccinated. I would suggest that the Department authorize or order me to visit these places for the purpose of vaccinating children and grown persons needing it. With such an order I am sure the local authorities in New Mexico would gratefully make vaccination compulsory, as well as the isolation of such as have the disease.

Seven-eighths of Mexican families immigrating into the United States at this port, with their children, have never been vaccinated; the other eighth present abnormal cicatrices.

On inquiry, I learn that most of these people had either vaccinated themselves or had been vaccinated by other incompetent or unprofessional persons.

The health officer of El Paso requested me to vaccinate every unprotected child or grown person I find entering El Paso through the railroad coming from Mexico.

The inspector has been directed by telegraph to visit and report upon the villages and ranches in New Mexico above indicated.

Reports of States, and yearly and monthly reports of cities.

INDIANA—*Evansville*.—Month of January, 1891. Population, 50,600. Total deaths, 58, including phthisis pulmonalis, 4; enteric fever, 1; diphtheria, 8; croup, 4; and whooping cough, 1.

IOWA—*Keokuk*.—Month of January, 1891. Population, 18,589. Total deaths, 11, including phthisis pulmonalis 1.

KENTUCKY—*Louisville*.—Month of January, 1891. Population, 227,000. Total deaths, 267, including phthisis pulmonalis, 24; enteric fever, 7; scarlet fever, 2; diphtheria, 10; and croup, 5.

LOUISIANA—*New Orleans*.—*Case of diphtheria in U. S. Marine-Hospital*.—Surgeon James M. Gassaway reports one case of diphtheria in the marine hospital. The patient has been isolated, and is doing well.

MICHIGAN.—Month of January, 1891. Reports from observers, compared with the preceding month, indicate that cholera infantum, whooping cough, dysentery, cerebro-spinal meningitis, and typhomalarial fever decreased in prevalence.

Compared with the average for the month of January in the fiscal years 1886-1890, cholera morbus, membranous croup, influenza, and puerperal fever were more prevalent, and whooping cough, cholera infantum, typhomalarial fever, diphtheria, measles, and typhoid fever were less prevalent in January, 1891.

Including reports by regular observers and others, diphtheria was reported present in Michigan in the month of January, 1891, at 78 places, scarlet fever at 301 places, typhoid fever at 41 places, and measles at 70 places.

Reports from all sources show diphtheria reported at 8 places more, scarlet fever at 1 place more, typhoid fever at same number of places, and measles at 37 places more in the month of January, 1891, than in the preceding month.

Grand Rapids.—Month of January, 1891. Population, 75,000. Total deaths, 77, including phthisis pulmonalis, 15; enteric fever, 2; and diphtheria, 7.

NORTH CAROLINA.—Month of December, 1890. Reports to the State board of health from 19 cities and towns, having an aggregate population of 116,200, show a total of 122 deaths, including phthisis pulmonalis, 16; enteric fever, 4; and diphtheria, 1.

OHIO—Cincinnati.—Month of January, 1891. Population, 300,000. Total deaths, 505, including phthisis pulmonalis, 10; enteric fever, 10; scarlet fever, 5; diphtheria, 30; measles, 1; and whooping cough, 1.

TEXAS—Reported spotted fever, etc.—The assistant surgeon of the Marine-Hospital Service at Galveston transmits a clipping from the *Galveston News* of February 7, reporting an epidemic of spotted fever at Springtown, Tex. Springtown is a small place in the northwestern part of the State, and lies in the northern part of Parker County. It is about 150 miles northwest of Fort Worth. It is not on the line of any railroad, the nearest being (according to a State map) the Fort Worth and Denver City Railroad. It has a population of about 500. Another case of smallpox is reported at Palestine, Tex. In Galveston, the 2 cases of smallpox reported some time ago have recovered and no other cases have appeared. Scarletina and measles are disappearing. Influenza in a mild form is very prevalent.

VIRGINIA—Lynchburg.—Month of January, 1891. Population, 25,000. Total deaths, 42, including enteric fever 1.

WASHINGTON—Seattle.—Month of December, 1890. Population, 50,000. Total deaths, 34, including diphtheria 1.

Table of temperature and rainfall, week ended February 6, 1891.

[Received from War Department, Signal Office.]

Locality.	Mean temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
New England States:						
Eastport, Me.....	21	4	.....	.98	.30	.....
Portland, Me.....	22	19	.....	.89	.34	.....
Boston, Mass.....	25	50	.....	.91	.....	.12
Block Island, R. I.....	31	22	.....	1.13	.....	.18
Middle Atlantic States:						
Albany, N. Y.....	24	18	.....	.63	.....	.17
New York, N. Y.....	31	38	.....	.91	.09	.....
Philadelphia, Pa.....	34	20	.....	.77	.....	.08
Atlantic City, N. J.....	33	28	.....	.84	.60	.....
Baltimore, Md.....	35	26	.....	.84	.....	.22
Washington, D. C.....	34	31	.....	.78	.11	.....
Lynchburg, Va.....	39	12	.....	.91	.....	.23
Norfolk, Va.....	42	32	.....	.91	.....	.16
South Atlantic States:						
Charlotte, N. C.....	44	29	.....	1.12	.....	.45
Wilmington, N. C.....	49	40	.....	.84	.46	.....
Charleston, S. C.....	51	43	.....	.91	.....	.72
Augusta, Ga.....	50	26	.....	1.00	.32	.....
Savannah, Ga.....	54	25	.....	.77	.14	.....
Jacksonville, Fla.....	58	40	.....	.84	.....	.81
Key West, Fla.....	71	20	.....	.49	.....	.49
Gulf States:						
Atlanta, Ga.....	46	13	.....	1.31	2.16	.....
Pensacola, Fla.....	55	25	.....	.99	.....	.59
Mobile, Ala.....	53	28	.....	1.12	.64	.....
Montgomery, Ala.....	52	30	.....	1.27	1.82	.....
Vicksburg, Miss.....	51	20	.....	1.25	.05	.....
New Orleans, La.....	57	32	.....	1.11	.69	.....
Shreveport, La.....	49	16	.....	1.12	.16	.....
Fort Smith, Ark.....	40	6	.....	.79	.24	.....
Little Rock, Ark.....	43	8	.....	1.42	1.83	.....
Palestine, Tex.....	50	4	.....	.98	.33	.....
Galveston, Tex.....	55	21	.....	.78	.....	.23
San Antonio, Tex.....	54	.....	7	.46	.89	.....
Corpus Christi, Tex.....	57	17	.....	.32	.....	.78
Brownsville, Tex.....	61	0	0	.42	1.40	.....
Rio Grande City, Tex.....	61	0	0	.23	1.40	.....
Ohio Valley and Tennessee:						
Memphis, Tenn.....	43	28	.....	1.40	2.83	.....
Nashville, Tenn.....	40	27	.....	1.32	.92	.....
Chattanooga, Tenn.....	44	22	.....	1.47	.63	.....
Knoxville, Tenn.....	41	26	.....	1.27	.97	.....
Louisville, Ky.....	36	10	.....	1.08	1.05	.....
Indianapolis, Ind.....	29	10	.....	.83	.....	.17
Cincinnati, Ohio.....	34	23	.....	.94	.64	.....
Columbus, Ohio.....	30	26	.....	.89	.12	.....
Pittsburgh, Pa.....	32	34	.....	.70	.31	.....
Lake Region:						
Oswego, N. Y.....	23	17	.....	.63	.04	.....
Rochester, N. Y.....	24	25	.....	.70	.....	.38
Buffalo, N. Y.....	24	29	.....	.70	.....	.10
Erie, Pa.....	27	16	.....	.84	.....	.16
Cleveland, Ohio.....	27	34	.....	.67	.....	.05
Sandusky, Ohio.....	27	47	.....	.70	.....	.38
Toledo, Ohio.....	26	24	.....	.56	.....	.31
Detroit, Mich.....	25	17	.....	.54	.....	.31
Port Huron, Mich.....	21	31	.....	.57	.....	.24
Alpena, Mich.....	16	10	.....	.56	.26	.....
Marquette, Mich.....	14	.....	30	.42	.30	.....
Grand Haven, Mich.....	23	5	.....	.51	.07	.....
Milwaukee, Wis.....	19	.....	3	.49	.....	.11
Chicago, Ill.....	24	.....	4	.56	.....	.35
Duluth, Minn.....	10	.....	50	.24	.....	.07
Upper Mississippi Valley:						
St. Paul, Minn.....	12	.....	45	.21	.....	.07
La Crosse, Wis.....	15	.....	40	.28	.....	.02
Dubuque, Iowa.....	19	.....	4	.35	.....	.31
Davenport, Iowa.....	22	5	.....	.42	.....	.34
Des Moines, Iowa.....	19	.....	5	.30	.....	.10
Keokuk, Iowa.....	25	7	.....	.41	.....	.32
Springfield, Ill.....	28	.....	9	.82	.....	.65
Cairo, Ill.....	36	12	.....	1.05	.81	.....
St. Louis, Mo.....	32	5	.....	.71	.....	.63

Table of temperature and rainfall, week ended February 6, 1891—Continued.

Locality.	Mean temperature in degrees Fahrenheit.			Rainfall in inches and hundredths.		
	Normal.	Excess.	Deficiency.	Normal.	Excess.	Deficiency.
Missouri Valley:						
Springfield, Mo.....	34	4	.....	.72	.....	.61
Kansas City, Mo.....	29	.....	1	.41	.....	.30
Leavenworth, Kans.....	27	11	.....	.35	.....	.30
Concordia, Kans.....	25	5	.....	.18	.....	.15
Omaha, Nebr.....	20	.....	28	.14	.23	.....
Valentine, Nebr.....	19	.....	40	.08	.10	.....
Huron, Dak.....	9	.....	45	.07	.04	.....
Extreme Northwest:						
Moorhead, Minn.....	1	.....	41	.17	.....	.11
Bismarck, Dak.....	5	.....	2	.14	.....	.10
Buford, Fort, Dak.....	5	.....	14	.07	0	0
Rocky Mountain Slope:						
Assiniboine, Fort, Mont.....	11	.....	14	.21	.....	.20
Helena, Mont.....	19	.....	84	.21	0	0
Custer, Fort, Mont.....	17	.....	70	.14	0	0
Salt Lake City, Utah.....	30	.....	49	.32	.....	.26
Cheyenne, Wyo.....	25	.....	40	.07	.....	.06
North Platte, Nebr.....	23	.....	67	.07	.....	.04
Denver, Colo.....	31	.....	96	.07	.....	.07
Pueblo, Colo.....	31	.....	86	.14	.....	.13
Montrose, Colo.....	28	.....	56	.07	.20	.....
Dodge City, Kans.....	29	1	.....	.09	.....	.09
Arlene, Tex.....	45	3	.....	.27	.....	.27
El Paso, Tex.....	47	0	0	.07	.....	.07
Sill, Fort, Ind. T.....	39	0	0	.34	.....	.30
Fort Grant.....	45	.....	14	.28	.....	.28
Santa Fé, N. Mex.....	30	.....	31	.20	.....	.06
Pacific Coast:						
Spokane, Wash.....	26	.....	14	.56	.....	.30
Olympia, Wash.....	38	14	.....	1.89	.....	1.10
Portland, Oreg.....	39	.....	14	1.68	.....	1.16
Roseburg, Oreg.....	41	0	0	1.24	.....	.20
Red Bluff, Cal.....	47	0	0	.89	.....	.80
Sacramento, Cal.....	48	6	.....	.78	.....	.58
San Francisco, Cal.....	51	14	.....	.99	.....	.50
Los Angeles, Cal.....	54	0	0	.79	0	0
San Diego, Cal.....	54	0	0	.57	.....	.40
Yuma, Ariz.....	57	0	0	.14	0	0

FOREIGN.

(Reports received through the Department of State and other channels.)

SPECIAL REPORTS.

Sanitary Commission at Constantinople—Report of U. S. commissioner—Cholera in Asiatic Turkey.

CONSTANTINOPLE, January 4, 1891.

SIR: I have the honor to submit reports Nos. 14 and 15 of Dr. Zavitziano, the legation's representative, on the sanitary commission of Constantinople.

I have the honor to be, sir, etc.,

SOLOMON HIRSH.

To the HON. JAMES G. BLAINE,
Secretary of State, Washington, D. C.

Sanitary Report No. 14.

I should be very happy indeed if I could make a report on some other question rather than cholera, but unfortunately this sad disease spreads continually, notwithstanding the cold weather, and threatens the table land of Asia Minor on the north and Beyrout and Lebanon on the south. It seems that in these two latter provinces strong measures have been taken against the spread of the epidemic, and by military cordons travelers coming from the infected places are forbidden entrance.

The commission of physicians appointed by the Vali, or governor-general, of Beyrout, together with the population, desires the removal of the lazaretto to another place, but the board of health, not finding another convenient place for its establishment, has decided on its remaining at Beyrout, except in case of Beyrout being infected, when it will be removed to the Island of Laros.

The number of deaths occurring daily at Tripoli is not less than 8, and has never exceeded 33.

On the 30th instant, at which time there had not been a single case of cholera at Aleppo for many days previous, two deaths occurred, but these two men had just arrived from Killis. At this city, as at Aintab, Marash, Orfa, and their neighboring places, new deaths from cholera are registered daily. Besides these places cholera has made its appearance much further to the north. In the district of Behzne deaths are daily occurring, and we see it at Djeven-maden or Meoner-maden, near to Kharpoot. I do not doubt that the authorities are continually establishing cordons, but surely they do not take any serious measure for cleaning and disinfecting the cities, towns, and villages.

Months ago the sanitary council made an application to the Government for the purchase of furnaces for disinfection, but up to the present time no answer has been received.

I hope that these furnaces will be bought, but under present appearances, if they are bought at all, it will be too late, as all Asia Minor, and perhaps Constantinople, will have been infected.

In the capital, 778 deaths have been registered for the month of November; among these 63 were caused by smallpox.

S. C. ZAVITZIANO.

CONSTANTINOPLE, December 26, 1890.

P. S.—Since the beginning of the epidemic at Tripoli up to the 21st 151 deaths have occurred in that city. Last week 73 deaths occurred, and the previous week 39. This has been taken word by word from the official reports, and I report this only to show what reliance can be placed upon them. Reckoning day by day the number of deaths noticed they amount to more than 200.

The official news of the 23d instant reports the appearance of cholera at Osmaine in the *Sanjar* of Gebel at Berellet.

S. C. ZAVITZIANO.

Sanitary Report No. 15.

I am very glad, indeed, to begin the New Year's report with rather agreeable news.

In the north of Syria in the vilayet of Aleppomamuriyet-el-Aziz, and Adana, cholera has nearly disappeared. There are always, it is true, a few cases, but we can hope that shortly they will also disappear.

So at Sintab on the 5th instant one death occurred, and on the 4th one death has also been registered at Slasta-Viran, in the vilayet of Diarbekir.

All the table lands in Asia Minor are now covered with snow, and cholera is no more heard of.

In the south, on the contrary, the news is rather bad. At Tripoli and in the surrounding villages of Corno, Tel-el-Honfrey, Kafrefy, Talihi, Tel-at-Hodide, Vachiel, Missi, Gebel-Souan, from the 17th up to the 22d of December (O. S.)—that is to say, from the 29th of December, 1890, up to the 3d instant—107 deaths from cholera have been officially registered.

The official sanitary news from the other vilayets of the empire is favorable.

In the vilayet of Erzerum there is an epizootic of typhus in oxen.

In the capital the public health is rather good. Smallpox is decreasing, as also is the congestion of the lungs.

S. C. ZAVITZIANO.

Prevention of the introduction of leprosy.

The United States sanitary inspector at Havana, Cuba, under date of February 2, 1891, writes as follows:

During the month of January, 3 well-marked cases of leprosy, for whom passage had been taken for the United States, were prevented from going there.

CHINA—*Hong-Kong*.—Month of November, 1890. Total deaths, 361, including phthisis pulmonalis 44.

CUBA—*Havana*.—Under date of February 2, 1891, the United States sanitary inspector reports as follows:

Month of January, 1891. Total deaths, 602, including yellow fever, 11; enteric fever, 7; so-called pernicious fever, 8; smallpox, 2; diphtheria and croup, 4; measles, 4; and glanders, 2.

Santiago de Cuba.—Two weeks ended December 31, 1890. Total deaths, 40, including phthisis pulmonalis, 7; smallpox, 1; yellow fever, 3; pernicious fever, 1; croup, 1; and whooping cough, 1.

DANISH WEST INDIES—St. Thomas.—Quarter ended December 31, 1890. Total deaths, 87, including phthisis pulmonalis, 7.

DEMERARA—Georgetown—Yellow fever on board steamship Esk and mortuary report.—Under date of January 3, 1891, the United States consul reports the following:

The steamship *Esk* of the Royal Mail Line arrived here on the 24th of December, having been quarantined at Barbadoes on account of a case of yellow fever taken on board at St. Thomas. She was immediately put in quarantine here, passengers not permitted to land, and left, still in quarantine, on the 1st instant. No further case was developed.

The following mortuary report has also been received: "Month of November, 1890. Population, 55,000. Total deaths, 267, including leprosy, 1, and measles, 1."

EGYPT.—Week ended January 8, 1891. The towns in upper and lower Egypt, including Gizeh and the Suez Canal, show a total of 824 deaths, including phthisis pulmonalis, 63; enteric fever, 13; smallpox, 1; diphtheria and croup, 3; and whooping cough, 6.

FRANCE—Bordeaux.—Month of December, 1890. Population, 240,582. Total deaths, 657, including enteric fever 22 and diphtheria and croup 11.

Nantes.—Month of November, 1890. Population, 127,482. Total deaths, 250, including phthisis pulmonalis, 29; enteric fever, 20; typhus fever, 14; diphtheria, 2; and measles, 29.

Month of December, 1890. Total deaths, 432, including phthisis pulmonalis, 51; enteric fever, 24; typhus fever, 7; diphtheria, 9; measles, 57; and whooping cough, 3.

Nice.—Month of December, 1890. Total deaths, 130, including phthisis pulmonalis, 7; diphtheria and croup, 2; enteric fever, 1; scarlet fever, 1; smallpox, 1; and measles, 1.

Rheims.—Month of December, 1890. Population, 97,903. Total deaths, 199, including phthisis pulmonalis, 25; enteric fever, 2; diphtheria and croup, 8; and whooping cough, 1.

Rouen.—Month of December, 1890. Population, 106,496. Total deaths, 356, including phthisis pulmonalis, 38; enteric fever, 18; and diphtheria, 10.

GREAT BRITAIN—England and Wales.—The deaths registered in 28 great towns of England and Wales during the week ended January 24 corresponded to an annual rate of 25.1 a thousand of the aggregate population, which is estimated at 9,715,559. The lowest rate was recorded

in Bradford, viz, 18.9, and the highest in Halifax, viz, 39.0 a thousand. Diphtheria caused 3 deaths in Manchester, 3 in Salford, and 2 each in Leeds, Sheffield, Portsmouth, and Newcastle-upon-Tyne.

London.—Two thousand two hundred and twelve deaths were registered during the week, including measles, 38; scarlet fever, 13; diphtheria, 17; whooping cough, 58; enteric fever, 7; and diarrhœa and dysentery, 16. The deaths from all causes corresponded to an annual rate of 25.7 a thousand. Diseases of the respiratory organs caused 845 deaths. In greater London 2,723 deaths were registered, corresponding to an annual rate of 24.2 a thousand of the population. In the "outer ring" the deaths included measles, 8; whooping cough, 17; diphtheria, 5; and scarlet fever, 4.

Ireland.—The average annual death rate, represented by the deaths registered during the week ended January 24, in the 16 principal town districts of Ireland, was 34.2 a thousand of the population. The lowest rate was recorded in Kilkenny, viz, 4.2, and the highest in Lurgan, viz, 77.0 a thousand. In Dublin and suburbs 260 deaths were registered, including enteric fever 4 and whooping cough 1.

Scotland.—The deaths registered in eight principal towns during the week ended January 24 corresponded to an annual rate of 24.9 a thousand of the population, which is estimated at 1,345,563. The lowest mortality was recorded in Greenock, viz, 13.6, and the highest in Paisley, viz, 40.4 a thousand. The aggregate number of deaths registered from all causes was 651, including measles, 7; scarlet fever, 18; diphtheria, 9; whooping cough, 27; fever, 5; and diarrhœa, 10.

Dundee.—Month of December, 1890. During the month there were 293 deaths registered, representing an annual death-rate of 18.45 per 1,000 of the population, and including phthisis pulmonalis, 29; enteric fever, 2; scarlet fever, 2; diphtheria, 1; croup, 2; and whooping cough, 4.

ITALY—Milan.—Month of December, 1890. Population, 399,081. Total deaths, 970, including enteric fever, 21; diphtheria, 24; and smallpox, 1.

MALTA AND GOZO.—Two weeks ended December 15, 1890. Total deaths, 152, including enteric fever 1 and diphtheria 4.

MEXICO—Paso Del Norte.—Two weeks ended January 31, 1891. Population, 10,000. Total deaths, 10. The United States consul, in his report, states that there is no way of ascertaining the number of cases of contagious diseases which occur in this district.

SAXONY—Plauen.—Month of December, 1890. Population, 49,376. Total deaths, 87, including scarlet fever 5 and diphtheria 1.

SWITZERLAND—*Zurich*.—Month of December, 1890. Population, 91,323. Total deaths, 205, including phthisis pulmonalis, 20; diphtheria and croup, 2; typhus fever, 1; and whooping cough, 1.

TURKEY IN ASIA—*Cholera*.—The United States consul at Beirut, Syria, reports as follows:

Week ended January 5, 1891. Three deaths from cholera in the city of Tripoli, Syria.

Week ended January 12, 1891. One hundred and fifteen cases and 5 deaths from cholera in the dependencies of Tripoli, Syria. No cases or deaths in the city of Tripoli.

The latest intelligence received from the vilayet of Aleppo gives 4 deaths from cholera during the period from December 27 to 31.

The following report is from the acting United States consular agent at Mersine, dated December 15, 1890:

In the vilayet of Adana Asiatic cholera first made its appearance at Mersine. We had a single case on the 14th November, followed by death on the 18th. The house was surrounded by a cordon and the people inside, 15 in number, were prevented from communicating with the town for eleven days. Since then public health in Mersine is excellent, but this is not the case with Adana, where cholera broke out on the 21st of last month with 4 cases, of which 2 were fatal. Since then it went increasing, reaching to its climax on the 2d of this month with 100 cases, of which 70 were fatal.

It is impossible for any of us to get correct accounts, as there exists no sanitary office in Adana.

Most of the doctors have fled, and those remaining avoid as much as possible to risk their lives without any profit. So that, according to their reports, they have only verified up to this day 99 cases of Asiatic cholera, all mortal within forty-eight hours, and of which 15 cases were instantaneous. Of course this is only the number of those who were attended by doctors, but the number of fellahs (peasants) and others who die without calling for medical attendance can not be verified. The grave-diggers say that they opened up to 100 graves in one day (the 2d current), and that very day the official report was 38.

MORTALITY TABLE, FOREIGN CITIES.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—								
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.	Whooping cough.
London.....	Jan. 17.....	5,877,390	3,123					6	27	27	59	
Paris.....	Jan. 17.....	2,260,945	1,304					13	5	37	20	
Liverpool.....	Jan. 17.....	620,448	304					1	7	1		
Hamburg.....	Jan. 4.....	570,534	285					4	2	5		
Hamburg.....	Jan. 10.....	570,534	312					4	3	6		
Glasgow.....	Jan. 17.....	545,678	364						3	3		
Brussels.....	Jan. 10.....	469,459	236			7						
Brussels.....	Jan. 17.....	469,459	238			12		7				
Warsaw.....	Jan. 10.....	455,852	244			4		1	1	17		
Rio de Janeiro.....	Jan. 3.....	450,000	281		5	8						
Rome.....	Nov. 29.....	417,392	181					2				
Amsterdam.....	Jan. 10.....	415,360	278					3		9		
Amsterdam.....	Jan. 17.....	415,360	272					1	2	15		
Lyons.....	Jan. 17.....	401,390	222					1		7		
Leipzig.....	Jan. 17.....	360,671	136						2	6		
Munich.....	Jan. 10.....	345,000	168					1	3	13		
Copenhagen.....	Jan. 3.....	312,387	88					1		7		
Copenhagen.....	Jan. 10.....	312,387	119					1		7		
Copenhagen.....	Jan. 17.....	312,387	136						2	4		
Cologne.....	Jan. 3.....	280,206	156								1	
Cologne.....	Jan. 10.....	280,206	145							10	1	
Odessa.....	Jan. 3.....	276,500	119									6
Dresden.....	Jan. 10.....	276,500	114					3	5	4		
Dresden.....	Jan. 17.....	276,085	102					1				
Barcelona.....	Jan. 17.....	272,000	233			6		7	1	8		
Barcelona.....	Jan. 23.....	272,000	419			6						
Edinburgh.....	Jan. 17.....	271,135	109					14		14		
Palermo.....	Jan. 10.....	250,000	162					1	1	3		
Palermo.....	Jan. 17.....	250,000	155						2	1		
Bristol.....	Jan. 17.....	235,175	135						1			
Belfast.....	Jan. 17.....	234,822	118						1			
Antwerp.....	Jan. 17.....	232,418	106					3	1	1		
Rotterdam.....	Jan. 17.....	209,137	116					1	1	1		
Rotterdam.....	Jan. 24.....	209,137	125									
Lyons.....	Jan. 10.....	201,930	232									
Pernambuco.....	Dec. 23.....	200,000	66			6		1		2		
Prague.....	Jan. 10.....	188,992	128			1			2	4		
Prague.....	Jan. 17.....	188,992	106			3			1	6		
Genoa.....	Jan. 17.....	180,613	108									
Frankfort-on-the-Main.....	Jan. 10.....	179,850	64									
Hanover.....	Jan. 10.....	165,800	69							11		
Konigsberg.....	Jan. 11.....	161,200										
Konigsberg.....	Jan. 18.....	161,200							1	3		
Trieste.....	Jan. 10.....	158,054	93							2		
Venice.....	Jan. 3.....	156,800	98									
Venice.....	Jan. 10.....	156,800	106			11		1	5			
Ghent.....	Jan. 10.....	152,395	99			1						
Ghent.....	Jan. 17.....	152,395	92							1		
Ghent.....	Jan. 24.....	152,395	66					2				
Christiania.....	Jan. 10.....	143,300	59			1						2
Nuremberg.....	Jan. 3.....	142,403	79							5		
Stuttgart.....	Jan. 17.....	139,659	48						5			
Funchal.....	Jan. 17.....	133,250	16							4		
Bremen.....	Jan. 10.....	124,940	49			1		2				
Cardiff.....	Jan. 10.....	121,477	62							2		
Danzig.....	Jan. 10.....	119,000	82									
Danzig.....	Jan. 17.....	119,000	50					1		4		
Cardiff.....	Jan. 3.....	117,012	70									
Stettin.....	Jan. 10.....	116,000	65									
Stettin.....	Jan. 17.....	116,000	54					1		4		
Havre.....	Jan. 17.....	112,074	61					2		7		
Aix-la-Chapelle.....	Jan. 11.....	111,445	51					2				
Leghorn.....	Jan. 11.....	103,723	62									
Leghorn.....	Jan. 18.....	103,723	64						1			
Catania.....	Jan. 11.....	109,000	53						1			
Catania.....	Jan. 18.....	109,000	81					2	1	1		
Orefeld.....	Jan. 17.....	108,000	93						1	2		
Gothenburg.....	Jan. 10.....	100,622	27									
Zurich.....	Jan. 10.....	91,323	25						3	8	1	
Zurich.....	Jan. 17.....	91,323	36					7		2	10	
Edinburgh.....	Jan. 17.....	80,736	20									
Mannheim.....	Jan. 10.....	80,000	43								2	
Mannheim.....	Jan. 17.....	80,000	22									

MORTALITY TABLE, FOREIGN CITIES—CONTINUED.

Cities.	Week ended.	Estimated population.	Total deaths from all causes.	Deaths from—							
				Cholera.	Yellow fever.	Smallpox.	Typhus fever.	Enteric fever.	Scarlet fever.	Diphtheria.	Measles.
Messina	Jan. 17	79,971	41							4	
Mayence	Jan. 10	73,271	28							4	
Jerez de la Pontera	Jan. 3	61,708	45			7					
Jerez de la Pontera	Jan. 10	61,708	37			6					
Jerez de la Pontera	Jan. 17	61,708	41			4					
Cadiz	Dec. 20	57,157	46					1		3	
Cadiz	Dec. 27	57,157	47					1		1	
Cadiz	Jan. 3	57,157	40					1		4	
Cadiz	Jan. 10	57,157	54							1	
Cadiz	Jan. 17	57,157	40							1	
Merida	Jan. 8	47,000	28								
Merida	Jan. 15	47,000	37		2						
Merida	Jan. 23	47,000	31								
Trapani	Jan. 10	43,066	9								
Trapani	Jan. 17	43,066	8								
Cienfuegos	Jan. 18	41,647	12	1							
Cienfuegos	Jan. 25	41,647	17								
Marsala	Jan. 10	40,131	19					1			
Marsala	Jan. 17	40,131	14								
Cape Town	Dec. 30	36,000	21								
Cape Town	Jan. 6	36,000	33					3			
Schiedam	Jan. 17	25,600	10								
Schiedam	Jan. 24	25,600	8								
Cardenas	Jan. 25	25,000	10							1	
Curacao	Jan. 24	25,000	6								
Gibraltar	Jan. 11	23,981	10							1	
Gibraltar	Jan. 18	23,981	13							1	
Vera Cruz	Jan. 22	23,800	19								
Vera Cruz	Jan. 29	23,800	25								
Girgenti	Jan. 10	23,547	15								
Girgenti	Jan. 17	23,547	16								
Licata	Jan. 10	19,000	8								
Licata	Jan. 17	19,000	12							2	
Kingston, Can.	Jan. 30	18,264	6								
Cartagena	Jan. 17	16,000	5								
Matamoras	Jan. 17	16,000	8								
Matamoras	Jan. 24	16,000	9			1					
Hamilton, Bermuda	Jan. 29	15,700	3								
Hamilton, Bermuda	Feb. 8	15,700	1								
Sagua la Grande	Jan. 17	15,605	9								
Sagua la Grande	Jan. 24	15,605	8								
Cape Haytien	Jan. 3	15,000	9								
Cape Haytien	Jan. 10	15,000	4								
Cape Haytien	Jan. 17	15,000	6								
Cape Haytien	Jan. 24	15,000	6								
Flushing	Jan. 17	13,200	8								
Flushing	Jan. 24	13,200	4								
St. Thomas, W. I.	Jan. 9	12,019	50							1	
St. Thomas, W. I.	Jan. 16	12,019	46								
St. Thomas, W. I.	Jan. 23	12,019	52							1	
Port Stanley and St. Thomas	Jan. 7	11,000	1								
Port Stanley and St. Thomas	Jan. 14	11,000	3								
Port Stanley and St. Thomas	Jan. 21	11,000	4								
Port Stanley and St. Thomas	Jan. 28	11,000	4								
Guelph	Feb. 1	10,173	3							1	
Tuxpan	Jan. 17	9,000	6								2
Tuxpan	Jan. 24	9,000	4								2
Chatham	Jan. 31	8,730	2								
La Guayra	Jan. 10	7,428	9								
La Guayra	Jan. 17	7,428	3								
La Guayra	Jan. 24	7,428	3								
Sarnia	Jan. 31	6,200	1								
Coaticook	Jan. 24	3,800	1					1			
Coaticook	Jan. 31	3,800	1								
Clifton, Ont.	Jan. 31	3,500	1								
Amherstburg	Jan. 31	3,100	4								
Livingston	Jan. 20	3,000	1								
Prescott, Ont.	Jan. 22	2,988	1								
Prescott, Ont.	Jan. 29	2,988	2								

OFFICIAL:

JOHN B. HAMILTON,
Supervising Surgeon-General, Marine-Hospital Service.

